APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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ART UNIT	PAPER NUMBER
2181	5

DATE MAILED:

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Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

	Application No.	**Applicant(s)**
Office Action Summary	09/223,660	HU ET AL.
	Examiner	**Art Unit**	
	Tim T. Vo	2181	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>*30 December 1998*</u> .

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>*1-22*</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>*1-22*</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

       1.☐ Certified copies of the priority documents have been received.

       2.☐ Certified copies of the priority documents have been received in Application No. _____ .

       3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

15)☒ Notice of References Cited (PTO-892)

16)☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)

17)☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .

18)☐ Interview Summary (PTO-413) Paper No(s). _____ .

19)☐ Notice of Informal Patent Application (PTO-152)

20)☐ Other: .

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Part III DETAILED ACTION

Notice to Applicant(s)

This application has been examined. Claims 1-22 are pending.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-22 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Tandon patent number 5,485,573 in view of Chung et al. refer heron Chung patent number 6,195,760.

As for claim 1, Tandon teaches a method of diagnosing a computer system after a failure (see fig 2, 6 and col 2 lines 3-5 of the specification), comprising:

Detecting a failure on a first computer system (see col 1 lines 21-25 of the specification);

Diagnosing the failure by analyzing one or more resources (see col 2 lines 40-60 of the specification) except Tandon does not expressly teaches accessing the computer system by utilizing a second set of system resource. However, Chung teaches such teaching that is when a primary computer is indicated failure then a backup computer becomes a primary (see abstract and col 1 lines 36-67 of the specification).

Therefore, it would have been obvious to a person of an ordinary skill in the art at the time the invention was made to have combined the teachings of Chung into the teachings of Tandon because Chung provides Tandon a backup system which is found reliable system, thereby it saves the cost for computer downtime (see col 1 lines 33-35 of Chung). Tandon and Chung fail to teach preserving the state of a first set of system resources after the failure occurs. "Official Notice" is taken that is preserving the state of a first set of system resources after the failure occurs is well known and expected in the art. It would have been obvious to include such teaching preserving the state of a computer system after the failure occurs into the system of Tandon and Chung to diagnose and analyze the reason for failure and thereby preventing errors in future.

As for claim 2, it is rejected as applied above in rejecting claim 1. Furthermore, Tandon teaches maintaining one or more lists of the first set of system resources (see col 2 lines 40-43 of the specification).

As for claim 3, it is rejected as applied above in rejecting claim 1. Furthermore, Tandon teaches one or more data lists a linked lists (see fig 1 elements 10 and col 3 lines 20-38 of the specification).

As for claim 4, it is rejected as applied above in rejecting claim 1. Furthermore, Tandon teaches first set of system resources comprise processing entities (see fig 1 element 24 and fig 2 of the specification).

As for claim 5, it is rejected as applied above in rejecting claim 1. Furthermore, Tandon teaches in which the processing entities comprises processes which are categorized into process types (see fig 2 steps 54-68 of the specification).

As for claim 6, it is rejected as applied above in rejecting claim 1. Furthermore, Tandon teaches suspending the state of one or more of the processes in the first set of system resources (see col 6 lines 63-67 of the specification).

As for claim 7, it is rejected as applied above in rejecting claim 1. Furthermore, Tandon teaches one or more processes to suspend are suspended by being entered into an idle loop (see col 4 lines 2-10 of the specification).

As for claims 8-9, they are rejected as applied above in rejecting claim 1. Furthermore, Tandon teaches one or more processes to suspend are suspended by an operating system scheduler and selected based upon their process type (see col 6 lines 63-67 and fig 5 of the specification).

As for claim 10, it is rejected as applied above in rejecting claim 1. Furthermore, Tandon teaches system resources that have been set aside for diagnostic purpose (see col 2 lines 3-5 of the specification).

As for claim 11, it is rejected as applied above in rejecting claim 1. Furthermore, Tandon teaches system resources comprises redundant hardware/software components (see col 3 lines 50-59 of the specification).

As for claim 12, Tandon teaches a method of diagnosing a computer system after a failure (see fig 2, 6 and col 2 lines 3-5 of the specification), comprising:

Detecting a failure on a first computer system (see col 1 lines 21-25 of the specification);

Diagnosing the failure by analyzing one or more resources (see col 2 lines 40-60 of the specification) except Tandon does not expressly teaches accessing the computer

system by utilizing a second set of system resource. However, Chung teaches such

teaching that is when a primary computer is indicated failure then a backup computer

becomes a primary (see abstract and col 1 lines 36-67 of the specification).

Therefore, it would have been obvious to a person of an ordinary skill in the art at the

time the invention was made to have combined the teachings of Chung into the

teachings of Tandon because Chung provides Tandon a backup system which is found

reliable system, thereby it saves the cost for computer downtime (see col 1 lines 33-35

of Chung). Tandon and Chung fail to teach preserving the state of a first set of system

resources after the failure occurs. "Official Notice" is taken that is preserving the state

of a first set of system resources after the failure occurs is well known and expected in

the art. It would have been obvious to include such teaching preserving the state of a

computer system after the failure occurs into the system of Tandon and Chung to

diagnose and analyze the reason for failure and thereby preventing errors in future.

As for claim 13, it is rejected as applied above in rejecting claim 12.

As for claim 14, it is rejected as applied above in rejecting claim 12.

Furthermore, Tandon teaches redundant system component comprises a disk drive

(see fig 1 elements 14, 16, 18 of the specification).

As for claims 15-16, they are rejected as applied above in rejecting claim 12.

Furthermore, Tandon teaches one or more resources comprises one or more

processing entities (see fig 2, 5, 6 of the specification).

As for claim 17, it is rejected as applied above in rejecting claim 12. Furthermore, Tandon teaches suspending the state of one or more of the processes in the first set of system resources (see col 6 lines 63-67 of the specification).

As for claim 18, it is rejected as applied above in rejecting claim 12. Furthermore, Tandon teaches one or more processes to suspend are suspended by being entered into an idle loop (see col 4 lines 2-10 of the specification).

As for claims 19-20, they are rejected as applied above in rejecting claim 12. Furthermore, Tandon teaches one or more processes to suspend are suspended by an operating system scheduler and selected based upon their process type (see col 6 lines 63-67 and fig 5 of the specification).

As for claims 21-22, Tandon teaches a medium readable by a processor, the medium being stored thereon a sequence of instruction which, when executed by the processor, causes the execution of a process of preserving the state of a computer system after a failure by performing (see col 1 lines 20-25 and col 3 lines 49-59 of the specification);

Detecting a failure on a first computer system (see col 1 lines 21-25 of the specification);

Diagnosing the failure by analyzing one or more resources (see col 2 lines 40-60 of the specification) except Tandon does not expressly teaches accessing the computer system by utilizing a second set of system resource. However, Chung teaches such teaching that is when a primary computer is indicated failure then a backup computer becomes a primary (see abstract and col 1 lines 36-67 of the specification).

Therefore, it would have been obvious to a person of an ordinary skill in the art at the

time the invention was made to have combined the teachings of Chung into the

teachings of Tandon because Chung provides Tandon a backup system which is found

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of Chung). Tandon and Chung fail to teach preserving the state of a first set of system

resources after the failure occurs. "Official Notice" is taken that is preserving the state

of a first set of system resources after the failure occurs is well known and expected in

the art. It would have been obvious to include such teaching preserving the state of a

computer system after the failure occurs into the system of Tandon and Chung to

diagnose and analyze the reason for failure and thereby preventing errors in future.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to examiner Tim Vo, whose telephone number is (703) 308-5862. The examiner can normally be reached on Monday-Friday from 7:00AM- 3:30PM.
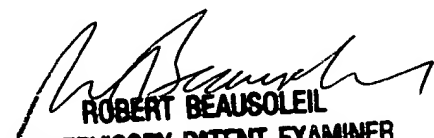
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, *Glenn Auve*, can be reached on *(703) 305-9638 or via e-mail addressed to [glenn.auve@uspto.gov]*. The fax number for this Group is (703) 308-5358.

Communications via Internet e-mail regarding this application, other than those under 35 U.S.C. 132 or which otherwise require a signature, may be used by the applicant and should be addressed to [tim.vo@uspto.gov].

All Internet e-mail communications will be made of record in the application file. PTO employees do not engage in Internet communications where there exists a possibility that sensitive information could be identified or exchanged unless the record includes a properly signed express waiver of the confidentiality requirements of 35 U.S.C. 122. This is more clearly set forth in the Interim Internet Usage Policy published in the Official Gazette of the Patent and Trademark on February 25, 1997 at 1195 OG 89.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3900.

Tim Vo
6/2/01

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